Memorandum of Understanding

Between



Directorate of Economics and Statistics, Govt of Chhattisgarh, Raipur And



Pt. Ravishankar Shukla University, Raipur

For

The Survey of Contribution of Minor Forest Products And

The Survey of Contribution of Non-Professional Fisherman



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The Memorandum of Understanding is made and entered into on the day of 16.05.2025 (Friday) May month of the year 2025.

Between

Director, Directorate Of Economics and Statistics, Government of Chhattisgarh (hereinafter called the 'DES' which expression shall, unless excluded by or repugnant to the context, include its successor in office and assignees) on the one part having office at Office of the Director, Economics and statistics, Chhattisgarh, Ground Floor, Block 2, Indravati bhavan, Nawa Raipur, Atal Nagar, on the First Part

And

Pt, Ravishankar Shukla University, Raipur, Chhattisgarh, having its office at Amanaka, G.E. Road, Raipur Chhattisgarh, (hereinafter refer to as "PRSU") which term shall, unless repugnant to the context, include its successor, representatives, administrators, and permitted assign) and represented through its authorized signatory on the "SECOND PART" to the context, include its successor(s), representative(s), administrator(s) and assignee(s) of the other part, and witnesses as herein.

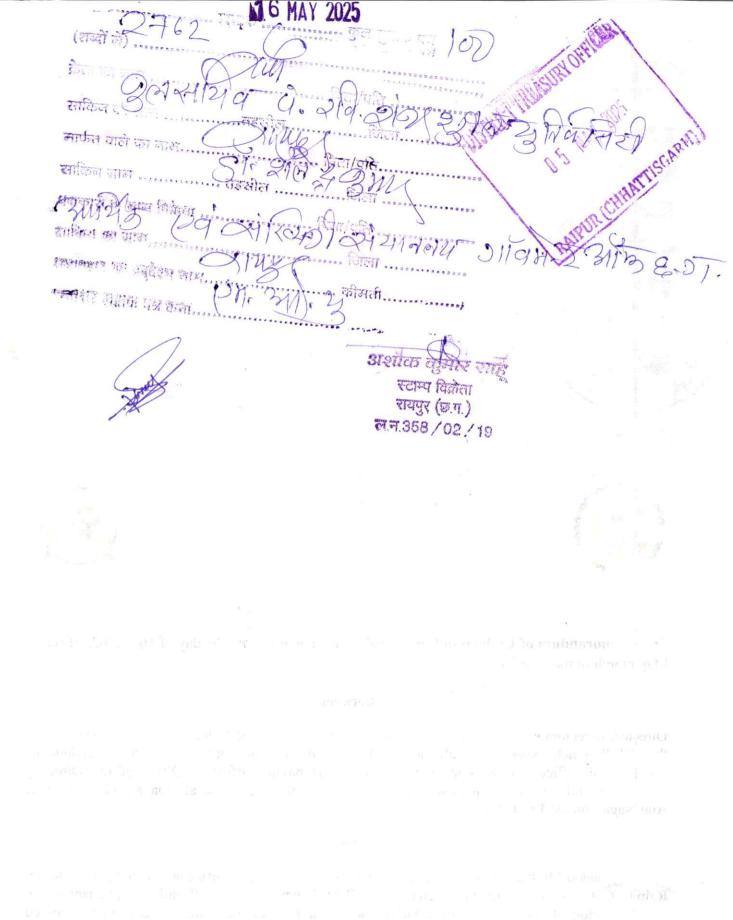
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ATTESTED

B. K. TIWARI NOTARY, GOVT. OF INDIA RAIPUR (C.G.) Regn. No. - 3787



Purpose

The purpose of this MoU is to establish a collaborative framework between DES and PRSU for the design, planning, execution, and reporting of a comprehensive survey across targeted sectors and regions.

Background

The core objective of survey is to estimate the contribution of Minor Forest products & Nonprofessional Fisherman in GSDP estimation. Survey is designed to collect some important information from the households which are involved in collection of minor forest produce expenditure while collecting, processing, selling and to measure their income from this activity as well as household involved in Non-professional Fishing.

Scope of Work

Under the Statistics Strengthening Assistance Scheme, a schedule design and instruction module has been prepared for conducting a survey on the contribution of subjects like the contribution of minor forest products, the contribution of non-professional fishermen to figure out their actual contribution in GSDP. It is proposed to use the results obtained after the survey in the estimation of state and district domestic products. For feeding of data, compilation of data, storage of data, analysis of data preparation of the drafts, charts, tables, etc., PRSU will use MS Excel and MS Word Software. PRSU will also be responsible for development of Final Report of both the Survey under the guidance and supervision of DES and will provide all the data in the soft copy to the DES for future usage and will also train DES personals regarding retrieval of desired data out the whole, as per time to time requirement.

Contribution of Minor Forest Products

For this schedule design, it is proposed to select villages from the list of Phad (Phad) available on the website of Chhattisgarh State Minor Forest Produce (Trading & Development) Co-operative Federation Ltd., Raipur, with the guidance of the Forest Department in the entire Chhattisgarh.

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Schedule A—household listing schedule; Schedule B—collection of minor forest products; and an instruction module guide have been prepared for the survey of the contribution of minor forest products. From the list of 10340 Phad (Phad) available on the website of Chhattisgarh State Minor Forest Produce (Trading & Development) Co-operative Federation Ltd., Raipur, select a 10 percent sample, i.e., 1034 Phad/village, and after listing all the households in each selected village, data will be collected in a schedule to obtain information from 15 sample families selected on the second level stratification based on simple random sampling. It is proposed to randomly select the villages included in each Phad by numbering them through LGD. It is proposed to prepare an estimate by applying a multiplier to the average result obtained in the survey with the total number of Phads. In this way, by collecting data from all the selected families in Schedule B, details of income and expenditure from the collection of minor forest products for the village and thereafter for the entire state will be obtained.

Geographical area of Chhattisgarh is 135198 sq km in which 59772 sq km is covered with forest. Chhattisgarh is the only state where 67 types of minor forest produce are being procured by the state government. The forest of Chhattisgarh is very rich in minor forest produce. There are many minor forests produce species of commercial importance in the state. These products are used by rural communities as medicine, food supplements and moreover, the rural communities earn substantial income especially during non-agriculture season through the collection and sale of these produce.

Outline of survey programme

Geographical coverage: The survey will cover whole rural areas of Chhattisgarh. Sample size: The data will be collected through whole rural Chhattisgarh by random sampling over 10 percent among 10340 list of phads from minor forest produce Federation. For second stage strata 15 household will be canvassed from selected phad by SRSWOR (Simple Random Sampling Without Replacement).

Survey Period: From 1 June to 31 October 2025 Schedule of Enquiry: - For only rural areas.

Schedule A - Household listing schedule

Schedule B - Collection of Minor Forest Products

Reference Period: The reference period for the survey is last 365 days from the date of survey.

Content of Instruction Module: This instruction module contains three chapter. Chapter One, besides giving an overview of the whole survey operation, It also describes in detail the sample design and the procedure for selection of households adopted in this survey. Chapter two discusses the concepts and definitions of certain important technical terms to be used in the survey. Chapter three contains schedule design and description.

Sample Design:

Rural: Data for the schedule will be collected through survey of rural areas. There are 20178 villages in whole Chhattisgarh. There are 10340 list of phads available for collection of minor forest produce. Survey will be conducted by taking the proportion of 10 percent of phads i.e. 1034 phads. These phads will be surveyed by listing all household residing in particular village and among them 15 household will be canvassed by SRSWOR for detailed schedule selected in the criteria in each village. In this way schedule will be canvassed to collect information on contribution of minor forest product in state GDP

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Urban: Urban areas will not be surveyed for this purpose.

Outline of sample design: A stratified multi-stage design will be adopted for the survey. The first stage units (FSU) will be entire village/ phads. FSUs will be selected by Simple Random Sampling without replacement (SRSWOR) scheme. The ultimate stage units (USU) will be households situated in rural areas.

Total sample size (FSUs): *Total 1034* villages will be surveyed in whole Chhattisgarh.

Proper identification of the FSU boundaries: The first task of the field investigators is to ascertain the exact boundaries of the village as per its identification particulars given in the sample list.

Listing of households: All the households of the sample FSU will be listed. Temporarily locked households will also be listed after ascertaining the temporariness of locking of households through local enquiry.

Formation of second stage strata (SSS) of households and allocation among SSS: All the household listed in the selected FSU will be stratified into second stage strata for the schedule. If there will be short fall in any strata, then it will be Compensate form next strata

Composition of the SSS and number of households to be surveyed from different SSS will be as follows:

SSS	Composition of SSS within a sample FSU	Number of households to be surveyed
SSS 1	Households involved in collection of MFP with agriculture activity	10
SSS 2	Households involved collection of MFP with other than agriculture activity	5
SSS 3	Households not involved in collection of MFP	0

If there will be short fall in any strata, then it will be Compensate form next strata Important concepts and definitions used in different schedules of this survey are explained below. Population coverage: The following rules regarding the population to be covered are to be remembered in listing of households and persons:

- 1. Under-trial prisoners in jails and indoor patients of hospitals, nursing homes etc., are to be excluded, but residential staff there in will be listed while listing is done in such institutions. The persons of the first category will be considered as members of their parent households and will be counted there. Convicted prisoners undergoing sentencewill be outside the coverage of the survey.
- 2. Floating population, i.e., persons without any normal residence will not be listed. But households residing in open space, roadside shelter, under a bridge, etc., more or less regularly in the same place, will be listed.
- 3. Neither the foreign nationals nor their domestic servants will be listed, if by definition the latter belong to the foreign national's household. If, however, a foreign national becomes an Indian citizen for all practical purposes, he or she will be covered.
- 4. Persons residing in barracks of military and paramilitary forces (like police, BSF, etc.) will be kept outside the survey coverage due to difficulty in conduct of survey there in. However, civilian

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populations residing in their neighbourhood, including the family quarters of service personnel, are to be covered. Permission for this may have to be obtained from the appropriate authorities.

5. Orphanages, rescue homes, ashrams and vagrant houses are outside the survey coverage. However, the residential staff of these institutions may be listed. People staying in old age homes will be covered in the survey.

House: Every structure, tent, shelter, etc. is a house irrespective of its use. It may be used for residential or non-residential purpose or both or even may be vacant.

Household: A group of persons normally living together and taking food from a common kitchen will constitute a household. It will include temporary stay-aways (those whose total period of absence from the household is expected to be less than 6 months during the survey period) but exclude temporary visitors and guests (expected total period of stay less than 6 months during the survey period).

Household size: The number of members of a household is its size.

Household's usual consumer expenditure (Rs.) in a month: Household's usual monthly consumer expenditure is the sum total of monetary values of all goods and services consumed by the household on domestic account with a monthly regularity. Unusual expenditures, such as, expenditure on social ceremonies, capitation fee, hospitalization etc. are to be excluded for deriving usual monthly consumer expenditure of the household

Minor Forest Product: Minor Forest Produce (MFP) means the produce from various forest species in the form of fruits, seeds, leaves, barks, roots, flowers and grasses etc., including entire plant of medicinal herbs/shrubs. The forests of Chhattisgarh are very rich in these MFP. There are many MFP species of commercial importance in the state. At present Chhattisgarh state government buys 52 minor forest produces from people. Some of these are Sal seeds, harrha, imlii, chirounjee, ghuthli, mahua seeds, kusumi lakh, rangini lakh, kulugond, nagermotha, honey (shahad), baherha, belguda, kalmegh, phoolihadu, puwad seeds, mahua flower (dry), jamun seeds (dry), kouch seeds, dhawaiphool, karanj seeds, amla without seeds.

Phad: Phads are village or group of villages from where minor forest federation procure minor forest produce. There are collection centres situated at villages where primary societies are registered.

Type of Household: For this survey households divided in three categories whether it is engaged in collection of MPF with agriculture activity or household involved in collection of MPF other than agriculture activity and the last one is the household do not have any involvement of collection of **MPF**

Forest: This includes all area actually under forest on land classified under any legal enactment or administered as forest, whether state-owned or private.

Van GramSamiti: The committees that come in villages located up to five kilometres from the forest block boundary in the degraded forest areas are called Village Forest Committees. These are forest areas that have become scarce due to biotic stress and which need to be reforested and re-established. SHG involved in Collection of MPF: Group is an unofficial organization working on the basis of mutual trust and help. Self Help Group is not needed to be registered through any act. Group is formed of 10 to 20 members of same economic and social status. In group decisions should be made unanimously on the basis of equality. So far possible group should be formed of members related to the same economic status i.e. group of members above poverty line should be formed different from the group of members of below poverty line.

Job Card Holder: Some villagers have job card for collection of minor forest produce that is provided by forest department to them.

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Agency for Buying MFP: There are some private or government agencies which are present in village, block or district level involved in buying MPF direct in raw or processed form. Example Primary Forest societies, SHGs, sanjivini, local hatbazar, etc.

NWFP MART and Sanjeevani: With an aim of developing specific trade system for Non nationalized Minor Forest Produce NWFP (Non-Wood Forest Produce) Mart is established at the six Forest headquarters in the state through which wholesale trading of raw forest produce and herbal products is done. Under this system minor forest produce collected and processed by local collectors / Self-help groups / Forest societies / Primary Co-operative Forest societies are buyed & sold at specific price. In addition to this above product are also sold in wholesale or retail through these outlets. The selling of herbal products is being promoted under the brand name of "Chhattisgarh Herbals". Promotion & Publicity of these products is done through different medium. For retail selling of these herbal products 30 Sanjeevani retail outlets are established in the headquarters of Divisional Forest offices.

SPECIFIED MINOR FOREST PRODUCE: Specified Minor Forest Produce are the one for which the trade monopoly lies with the state government. The collection and sale of Specified Minor Forest Produce is done by C.G.M.F.P. Federation being the only agent of State Government. The Federation sells the collected produce by inviting National level e-Tenders and conducting e-Auctions. The state monopoly has been created to ensure payment of fair price to the rural gatherers of forest produce. Tendu leaves (Diospyrosmelanoxylonroxp) and Gums [Category I - Kullu (Sterculiaurens) Gum & Category II - Dhawda (Anogeisuslatifolia), Babool (Acacia indica) and Khair (Acacia catechu) Gum] are the Specified MFPs in the state. Chhattisgarh Tendu Leaves (Vyapar Viniyaman) Adhiniyam, 1964 and the rules made there under regulate the trade of tendu leaves and Chhattisgarh Vanopaj (Vyapar Viniyaman) Adhiniyam, 1969 and the rules made there under regulate trade of Gums (Category I & II).

NON-SPECIFIED MINOR FOREST PRODUCE: Non-Specified Minor Forest Produces are those Minor Forest Produces on which the state does not have any monopolistic control. Nevertheless, the state develops these resources through enabling policy. M.F.P. Federation promotes their in-situ conservation, value addition, processing and marketing of minor forest produce to provide maximum benefits to the local communities and the MFP collectors.

Chhattisgarh State Minor Forest Produce (Trading & Development) Co-operative Federation Ltd., Raipur is the three tier Co-operative organization created with an objective to promote the trade and development of Minor Forest Produce in the interest of MFP gatherers, on co-operative pattern.

LISTING SHEDULE AND DETAILED SCHEDULE

Introduction: Listing schedule is meant for listing of all the houses and households residing in the sample first stage unit (FSU). Some household information like household size, whether household having involvement in collection of MPF with agricultural activity or having involvement in collection of MPF other than agricultural activity, usual monthly consumer expenditure of a household will also be collected in this schedule. This auxiliary information will be used for grouping the households into different second-stage-strata (SSS). The sampling frames for selection of households will be prepared and details of the selection of sample households will be recorded in this schedule.

Structure of schedule A i.e. Listing Schedule:

Schedule A contains the following blocks:

Block 0: descriptive identification of sample FSU

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Block 1: identification of village

Block 2: List of households and selection of households

Starting point for listing: The listing may be done in the same order as that of the 2011 Census order of house listing. If the census order of house listing is not available, the listing may be started from the northwest corner of the FSU and proceeding southwards in serpentine order. While listing the households, some essential minimum particulars about the households will be collected for the purpose of formation of second stage strata.

Block 0: descriptive identification of sample FSU

This block is meant for recording descriptive identification particulars of the sample FSU. State/UT, district, tehsil, village name, investigator name date of survey is to be filled here properly in the appropriate places. A dash (-) may be recorded against not applicable items.

Block 1: Identification of sample village

Item 1: Approximate present population: This may be ascertained mainly from knowledgeable persons by putting certain probing questions. The starting point can be 2011 Census population. In the case of large difference with census population, it may be asked whether there has been any abnormal influx into or exodus from the village after the census or the village has been split or partly merged with other village.

Item 2: Households involved in collection of MFP: This may be ascertained mainly from sarpanch, any forest office located in village boundary or the knowledgeable persons by asking some questions. In this item all the households belong which are involve in any kind of collection of MFP in last 365

days of preceding the date of survey.

Item 3: Whether village is associated with near byforest: If near by the village there is any forest area where villagers can easily go to collect MFP for their own consumption and for sale. In this case this item will be filled with code 1 otherwise code 2.

Item 4: Number of persons having job card for collecting MFP: Total number of persons in a village will be written here those having job card provided by any government institution to collect MFP. This information will be collected from forest office situated in village or by any knowledgeable person.

Item 5: Government agency for procuring MFP in village: There can be different agencies like primary sahakari samiti, MFPED, Sanjivani or any other government body available in village for procuring MFP from villagers on MSP. Total number of all those institutions will be filled in this item.

Item 6: Any other agency for procuring MFP in village: In a village MFP procured by other agencies like Local collectors, Self-help groups or any other non-government agencies are also available. The total number of all these types of agencies will be filled in item 6.

Item 7: Number of SHGs or samiti in village for collection of MFP: In entire village number of total SHG and samiti will be recorded.

Item8: Whether any forest office within village: In village boundary whether any forest office of government is situated, this information will be recorded as code 1 for yes and code 2 for no.

Item9: Name of van prabandhan samiti: If any van Prabandhan samiti is situated in village then in this item its name will be recorded.

Block 2: Listing of households and selection of households:

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Rolling 12/2 off Column No 1: House number: All houses including vacant ones shall be listed by giving a house number. The 2011 Population Census house number or the number given by the local panchayat, municipality or other local bodies, may be used if available. The houses without such numbers will be given a separate running serial number starting from 1 within brackets. Wherever house numbers are available, even if not for all the houses, the actual house numbers shall be recorded without any bracket. After listing all the households associated with a house, the next house shall be listed. If the house is used solely for non-residential purposes or is vacant, the purpose to which it is put will be written across the line, e.g. temple, vacant structure, etc. For family living under a tree or bridge etc. (i.e. without any house), a '-' may be put in this column.

Column No 2: Household serial number: The household(s) normally residing in the house or in a fixed location (e.g. under a tree/ bridge/ open space etc.) listed in column (1) will be numbered in column (2). All households (including those found temporarily absent) will be given a running serial number in this column starting from 1. In case of persons staying in, say, hostels and forming single member households, each of them will be listed in separate lines giving a household serial number. Continuous serial number starting from 1 will be given in column (2) for the households in the FSU. This column will be left blank for the lines meant for vacant houses, non-residential buildings, etc.

Column No 3: Name of head of the household: For a household having serial number in column (2), the name of head of the household shall be recorded here.

Column No 4: Household size: The size of each household will be recorded in this column. Two small box spaces are provided against this column at the end of each page to record the current page total for this column and the cumulative total for the pages.

Column No 5: Whether households engaged in collection of MFP: If any household member was engaged with collection of MFP preceding the last 365 days on the date of survey, code 1 is to be recorded in this column otherwise code 2.

Column No 6: Type of households related to collection of MFP: If there is code 1 in column 5 then this column will be filled. Whether the household is involved in collection of MFP with agricultural activity or household is involved in collection of MFP with other than agricultural activity or household is not involved in collection of MFP, will be recorded here with appropriate code.

Column No 7: Whether household having job card for collecting MFP: The information of household having job card for collecting MFP is recorded with code 1 otherwise code 2 will be recorded here.

Column No 8: Whether household registered in van prabandhan samiti: In this column information about registration in van prabandhan samiti of household will be provided with code 1 otherwise code 2

Column No 9: Household's usual consumer expenditure (Rs.) in a month: Household's usual monthly consumer expenditure is the sum total of monetary values of all goods and services consumed by the household on domestic account with a monthly regularity. Unusual expenditures, such as, expenditure on social ceremonies, capitation fee, hospitalization etc. are to be excluded for deriving usual monthly consumer expenditure of the household

Structure of schedule B i.e. Contribution of MFP in households' income

Block 0: General: for recording descriptive identification particulars of the sample FSU, district, tehsil, village name, investigator name date of survey second stage strata number, sample household

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number are to be filled here properly in the appropriate places. All the items in this block are selfexplanatory.

Block 1: Identification of Household

Item 1: Name of the head of Family: The name of head of the family will be provided here which is recorded in block 2 of listing schedule.

Item 2: Religion (code): The religion of the household will be recorded against this item in code. The codes are: Hinduism 1

4 others 9

Item 3: Social group (code): Whether or not the household belongs to scheduled tribe, scheduled caste or other backward class will be indicated against this item in terms of the specified codes which are:

> scheduled tribe (ST) - 1, scheduled caste (SC)-2, other backward class (OBC) - 3, others - 9

Item 4: household size: The size of each household will be recorded in this column. Two small box spaces are provided against this column at the end of each page to record the current page total for this column and the cumulative total for the pages.

Item 5: occupation type of household: Whether any member of the household having involvement in collection of MPF with agriculture activity is given code 1 and the household having involvement in collection of MFP with activity other than agriculture code 2 will be given.

Item 6: description about major source of livelihood of household except collection of MFP: This item is intended to capture the detail description about major source of livelihood of household whether engaged in agriculture or other than agricultural or nonfarm activities except collection of

Item 7: Income received by major source of livelihood of household except collection of MFP: The total income received by the household through with major activity performed for his livelihood will be recorded here in Rs.

Item 8:no of household members involved in MFP collection: Total number of household members those are related with collection of MFP will be recorded in this item.

Item 9: total no of household members having job card: The information about total number of household members having MFP collection card provided by forest department will be registered here.

Item 10: Whether household having registration in primary society of MFP: Here the information of household registered in any primary society related with collection of MFP will be recorded with appropriate code.

Block 2: Demography of household members

In this block, demographic particulars (viz., relation to head, sex, age,), educational level, usual principal activity status will be recorded using one line for each of the members of the household.

Column no 1: S No: Running serial number will be given in this column for each household members starting with the head of the household. The other members will be listed in the usual fashion with the spouse of the head and their children following and the non-relatives at the end.

Column no 2: name of the member: The names of the members corresponding to the serial numbers entered in column 1 will be recorded in column 2.

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Column no 3: relation to head (code): The relationship of each member of the household to the head of the household (for the head, the relationship is 'self') will be recorded in this column. The codes are:

self -1, spouse-2, children-3, mother/father-4, others-9

Column no 4: gender (code): The gender code of each member of the household will be recorded in this column. The codes are: male - 1, female - 2, transgender -3

Column no 5: age (years): The age in completed years of all the members listed will be ascertained and recorded in this column. For infants below one year of age, '0' will be entered.

Column no 6: level of education (code): The highest level of education completed by the member of the household considering all the general/technical/vocational educational level successfully completed by him/her, will be recorded here in terms of codes. The codes for the highest level of education completed to be recorded in column 6 are given below:

not literate-1, literate-2, primary-3, upper primary/middle-4, high school-5, higher secondary-6, gradution-7, post gradution-8, others-9

Column no 7: principal industry (NIC-2008): The description of the principal industry of the household will be recorded in the space provided. The description of the principal industry should be recorded in as specific terms as possible based on the description given by the informant. In other words, the industry description should not be copied from the NIC booklet if the informant's description gives a clearer idea of the industrial activity, which determines the principal industry of the household. The appropriate two-digit industry code of the NIC-2008 will be recorded here.

Column no 8: principal occupation (NCO-2004): The description of the principal occupation of the household will be recorded in the space provided. The description of the principal occupation should be recorded in as specific terms as possible based on the description given by the informant, as in case of principal industry. In other words, the occupation description should not be copied from the NCO booklet if the informant's description gives a clearer idea of the principal occupation pursued by the household. The appropriate three-digit occupation code of the NCO-2004 is to be recorded in the entry cell, which has been divided into three parts for recording each digit separately. For households deriving income from non-economic activities only, a dash (-) may be put against this item.

Column no 9: whether household member is engaged with collection of MFP: If any member of household is engaged with collection of MFP throughout last 365 days then for yes code 1 will be listed against the members row otherwise for no code 2 will be recorded.

Column no 10: whether household member is engaged with manrega work: If any member of household is involved in manrega work throughout last 365 days then for 'yes' code 1 and for 'no' code 2 will be recorded.

BLOCK 3:

3.1 Detail of expenditure in collection of MFP in last 365 days: If code 1 in column 9 of block 3

Column no 1:S No: Serial no copied from block 3 for each household members

Column no 2:name of the member: The names of the members corresponding to the serial numbers entered in column 1 will be recorded in column 2.

Column no 3: Type of minor forest: The name of minor forest produce which the household member collected in last 365 days will be recorded in this column. If one member of household collected two or more MFP in last 365 days then separate lines will be used for recording the information against the same member.

Column no 4: Quantity of MFP collected: The total quantity of minor forest produce which was collected by household member in last 365 days will be recorded here in kg.

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Column no 5: Time taken for collecting MFP: Total time taken for collecting the MFP in last 365 days by household member will be provided in complete days.

Column no 6: Vehicle used for collecting MFP: Vehicle used for collecting MFP refers that the transport used by household members to reach the destination for gathering minor forest produce. The admissible codes are:

on foot-1, cycle-2, motorcycle-3, any own four-wheeler-4, rented vehicle-5, others-9

In case more than one such mode was used by the household member for which equal distance was travelled then entry is to be recorded for that means which was more expensive.

Column no 7: Total expenditure for collection and processing of MFP: All expenditure done in last 365 days such as related to fuel of vehicle for collecting minor forest produce and, if expenditure done in processing method of MFP should be recorded in this column.

Column no 8: Quantity of self-consumption after collection and/or processing: Total quantity of minor forest produce which is collected by household members and/or processed in last 365 days and used for own/household consumption will be recorded here in kilogram.

3.2 Detail of expenditure during selling of MFP in last 365 days:

Column no 1: S No: Running serial no will be given in this column for each household members Column no 2: name of the member: The names of the members corresponding to the serial numbers entered in column 1 will be recorded in column 2.

Column no 3: Type of minor forest: The name of minor forest produce which the household member collected in last 365 days will be recorded in this column. If one member of household collected two or more MFP in last 365 days then separate lines will be used for recording the information against the same member.

Column no 4: Quantity of MFP collected: The total quantity of minor forest produce which was collected by household member in last 365 days will be recorded here in kg.

Column no 5: Vehicle used for selling MFP: Vehicle used for selling MFP refers that the transport used by household members to reach the market or any other agency for selling minor forest produce. The admissible codes are:

on foot-1, cycle-2, motorcycle-3, any own four wheeler-4, rented vehicle-5, others-9 In case more than one such mode was used by the household member for which equal distance was travelled then entry is to be recorded for that means which was more expensive.

Column no 6: Place for selling of MFP: The information of place for selling of minor forest produce by household members will be recorded here. The admissible codes are:

Within village -1, within boundary of panchayat -2, block headquarter -3, district headquarter -4, other -9,

In case more than one such place was used by the household members for selling minor forest produce then entry is to be recorded where the maximum produce is sold.

Column no 6: Agency for selling of MFP: In this column information regarding type of agency where the household member sold his minor forest produce will be provided. Admissible codes are:

Local Haat Bazaar - 1, Govt. Agency - 2, Mandi/phads - 3, Sanjeevani/Mart - 4, Wholesale businessman -5, others- 9

3.2 Detail of exchange value during selling of MFP in last 365 days:

Column no 1: S No: Running serial no will be given in this column for each household members Column no 2: name of the member involved in collection of MFP: The names of the members who involved in collection of MFP will be entered in this coloumn.

Column no 3: Type of minor forest: The name of minor forest produce which the household member collected in last 365 days and sold will be recorded in this column. If one member of household collected two or more MFP in last 365 days then separate lines will be used for recording the information against the same member.

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Column no 4: Whether MFP sold for commodity exchange: In this coloumn if the member sold MFP for commodity exchange then code 1 for yes otherwise code 2 for no will be entered here.

Column no 5: Name of the place for Batring: In this column the place where household member sold the MFP for commodity exchange has to be recorded here. The codes are within village-1, within panchayat-2, within blockheadquater-3, within district headquarter-4, others-9

Column no 6: Name of the commodity received through exchange of selling of MFP: The name of commodity or things which house hold member received by exchange through any shop or elsewhere of MFP which was collected by him or her will be entered here.

Column no 7: Quantity of the commodity received through exchange of selling of MFP: The quantity of commodity or things which house hold member received by exchange through any shop or elsewhere of MFP which was collected by him or her will be entered in this coloumn.

Column no 8: Value of the commodity received through exchange of selling of MFP: The imputed value of commodity or things which house hold member received by exchange through any shop or elsewhere of MFP which was collected by him or her will be entered in this coloumn

3.4 Income received after selling of collected/processed MFP: This item consist of income received by all household members after selling of collected/processed MFP in last 365 days in Rs.

3.5 Income received by the household if any member of the house hold received any brokerage income through any SHG or any institution having involvement in collection of minor forest produce will be recorded in this item.

3.6 Total income (3.4 +3.5): In this item total income of the house hold that will be Income received after selling of collected/processed MFP and Income received by the household if any member of the house hold received any brokerage income through any SHG or any institution having involvement in collection of minor forest produce recorded.

Roller Moder

Contribution of Non-Professional Fishermen

Chhattisgarh occupies 135194 square km which is 4.14% of the geographical area of India. State has 91,928 Rural Pond area covering 1.094 Lakh ha and 1770 Irrigation Reservoir covering 0.826 Lakh ha Water area totalling to 1.920 Lakh ha water area available for fisheries development up to 2020-21. Out of the available Water Resources 1.006 lakh ha. rural pond area and 0.801 lakh ha. irrigation reservoir water area, thus totalling 1.812 lakh ha. water has already been brought under fish culture till 2020-21. The fisheries sector is a principal source of livelihood for a large section of economically under privileged population of the state especially in the rural areas.

Similarly, for the survey of the contribution of nonprofessional fishermen, it is proposed to survey all the revenue villages situated within a 3 km radius of 141 river anicuts of the state as per the list provided for nonprofessional fishermen or institutions. It is proposed to estimate the contribution of nonprofessional fishermen to the gross domestic income of the state by obtaining information from nonprofessional fishermen or institutions. Hence, for this survey a multi-stage stratified survey is to be designed for obtaining the final result. In the first stage, listing of entire villages is to be done from all revenue villages situated within a 3 km radius of 141 river anicuts, and second-level information is to be obtained from 15 non-professional fisherman families selected through random sampling in the listing. In this, details of per fisherman household along with the number of members involved in fishing, location distance, name of resource used, quantity of fishing in the last 7 days, type, resource, income-expenditure, etc. will be collected. In this way, from the information obtained per fisherman household, the contribution of nonprofessional fisherman to state household income will be estimated for the entire state.

Fisheries are first and foremost a human activity that produces income and food and generates employment. Due to presence of abundant water sources Chhattisgarh plays an important role by generating self-employment through fisheries as well as provides nutritious food to rural folks. The objective of this survey is to focus on catching of fishes by nonprofessional fisherman. This survey is mainly designed to find the data gap for estimation of state GDP between catching of fishes by nonprofessional fisherman and catching of fishes and consumed by them. The survey will also focus on the livelihoods of the people directly involved in the activities, their employment, the general profitability of the activity and demographic patterns

Geographical coverage: -The survey will cover 141 anicuts of state rivers.

Survey Period: - From 01 September to 31 December 2025

Schedule of Enquiry:

Schedule A – Catching of fishes by nonprofessional fisherman

Reference Period: The reference period for the survey is somewhere last 7 days and somewhere last 30 days days from the date of survey.

Content of Instruction Module: This instruction module contains three chapters. Chapter 1. One, besides giving an overview of the whole survey operation, It also describes in detail the sample design and the procedure for selection of informant fisherman. Chapter two discusses the concepts and definitions of certain important technical terms to be used in the survey. Chapter three contains schedule design and description.

Outline of sample design: This survey is based on annicut based villages survey. .Revenue villages within the radioed of $0\overline{3}$ km of all 141 annicut will be surveyed to identify nonprofessional fisherman household. At first all household of these selected villages will be listed and then for second stage strata selected nonprofessional fisherman's household will be canvassed to collect data.

Total sample size (FSUs): Total 141anicut will be surveyed in whole Chhattisgarh. 3.

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- Proper identification of the FSU boundaries: The first task of the field investigators is to ascertain the exact boundaries of the village as per its identification particulars given in the sample list.
- Listing of households: All the households of the sample FSU will be listed. Temporarily locked households will also be listed after ascertaining the temporariness of locking of households through local enquiry.
- Formation of second stage strata (SSS) of households and allocation among SSS: All the household listed in the selected FSU will be stratified into two second stage strata for the schedule that whether the family is involved in nonprofessional fishing or not. Such 15 those household involved in nonprofessional fishing will be selected for detailed canvassing.

CONCEPT AND DEFINITION

- Household: A group of persons normally living together and taking food from a common kitchen will constitute a household. It will include temporary stay-aways (those whose total period of absence from the household is expected to be less than 6 months during the survey period) but exclude temporary visitors and guests (expected total period of stay less than 6 months during the survey period).
- **Household size:** The number of members of a household is its size. 8.
- Household's usual consumer expenditure (Rs.) in a month: Household's usual monthly 9. consumer expenditure is the sum total of monetary values of all goods and services consumed by the household on domestic account with a monthly regularity. Unusual expenditures, such as, expenditure on social ceremonies, capitation fee, hospitalization etc. are to be excluded for deriving usual monthly consumer expenditure of the household
- Dwelling unit: It is the accommodation used by a household for its residential purpose. It may be an entire structure or a part thereof or consisting of more than one structure.
- Fisherman: A fisher or fisherman is someone who captures fish and other animals from a body of water, or gathers shellfish. Fisherman may be professional or recreational. There are organized or unorganized fisherman also to be found.
- Water bodies: It can be broadly separated into salt water and fresh water. Salt water is 97% of all water and is found mostly in our oceans and seas. Fresh water is found in glaciers, lakes, reservoirs, ponds, rivers, streams, wetlands and even groundwater. Our survey purpose we define itin form of river canal lakes and anicuts etc.
- Anicut: Anicuts are small weirs built to divert water from rivers into canals dug on their banks. They are built to provide water for a whole lot of things including irrigation, groundwater recharge, arresting soil erosion and reducing flood peaks. There are 1090 anicuts in all over Chhattisgarh on different rivers. These anicuts have great potential of fishing. A large number of fisherman's livelihood depends on them.
- Organized and Unorganized fisherman: Fishing is done in Chhattisgarh by the fisherman as organized (All registered ponds and reservoirs) and unorganized (in anicuts) way. Those who are member of cooperative societies or SHG of fishing are said to be Organized fisherman similarly fisherman doing fishing as individual are said to be unorganized fisherman.
- Fishing cooperative society: There are group of people registered under society act for fishing activity and forming fishing cooperative societies. 1550 primary fishing cooperative societies are registered in Chhattisgarh.
- Usual place of residence: A place (village/town) where the person had stayed continuously 16. for a period of six months or more
- Species of fishes for fresh water: The production of carps is the general production practice in Chhattisgarh. The three major carps, namely catla (Catla catla), rohu (Labeo rohita) and mrigal

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(Cirrhinus mrigala), silver carp contribute the bulk of production; followed by silver carp, grass carp and common carp forming a second important group in Chhattisgarh. The farming of giant freshwater prawn (Macro brachium Rosenberger) has gained increased interest in recent years, due to its high economic value and export potential. Other local varieties like Tennga, sarangi manger, etc., also found in Chhattisgarh.

- Area of fish culture: Chhattisgarh has endowed with varied water resources. There are 18. three categories of available water resources in the state, i.e., village ponds, irrigation tanks and reservoirs along with-it running water sources like river, canal etc., also available for pisciculture.
- 19. Trained fisherman: Fisherman those who are trained by any government bodies or through any NGO for 3 days to 10 days training programme will be considered as trained fisherman. It can be formal and non-formal both.
- Government help to fisherman: Government runs various kind of scheme through which 20. fisherman gets help like insurance, seeds, boat and net subsidy to buy equipment's. Some accidental relief schemes also provided by Government
- Educational level: It refers to the different stages of educational attainment. It is the highest level a person has completed successfully. A person is considered literate if he/she can read and write a simple message in at least one language with understanding.
- Principal Economic activity: The usual principal activity status of a person is determined with a reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively long time (major time criterion) during the 365 days preceding the date of survey is considered the usual principal activity status of the person. To decide the usual principal activity of a person, he/ she is first categorized as belonging to the labour force or not, during the reference period on the basis of major time criterion. Persons, thus adjudged as not belonging to the labour force are assigned the broad activity status 'neither working nor available for work'. For the persons belonging to the labour force, the broad activity status of either 'working' or 'not working but seeking and/ or available for work' is then ascertained again on the basis of the relatively long time spent in the labour force during the 365 days preceding the date of survey. Within the broad activity status so determined, the detailed activity status category of a person pursuing more than one such activity will be determined again on the basis of the 'relatively long time spent' criterion. Thus, if a person categorized as engaged in economic activity (working) is found to be pursuing more than one economic activity during the reference period, the appropriate detailed activity status category will relate to the activity in which relatively more time has been spent
- Average monthly expenditure: Household's average monthly expenditure is the sum total of monetary values of all goods and services consumed by the household on domestic account with a monthly regularity. Unusual expenditures, such as, expenditure on social ceremonies, capitation fee, hospitalization etc. are to be excluded for deriving usual monthly consumer expenditure of the household.

Catching of fishes by Non-Professional Fisherman

Introduction: For this survey the population is the legally Nonprofessionals fisherman those are engaged in catching fish from running water or from anicut for sell or self-consumption. Listing schedule is meant for listing of all the houses and households residing in the sample first stage unit (FSU). Some household information like household size, whether household having involvement in collection of fish, whether any member of the household is involved in fishing average monthly income from principal economic activity also be collected in this schedule. This auxiliary information will be used for grouping the households into different second-stage-strata (SSS). The sampling

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frames for selection of households will be prepared and details of the selection of sample households will be recorded in this schedule.

Block 0:

General: This block is meant for recording descriptive identification particulars of the sample FSU. district, tehsil, village name, investigator name, date of survey, name of anicut surveyed, are to be filled here properly in the appropriate places. A dash (-) may be recorded against not applicable items.

Block 1:

Description of fisherman:

Item 1: name of fisherman: Name of fisherman from whom enumerator gets information about the fishing activity will be written here. The fisher used to come more or less regularly at anicut bank for fishing.

Item 2: gender: The gender code of each member of the fisherman' household will be recorded in this column. The codes are: male - 1, female - 2, transgender -3

Item 3: number of members in fisherman's household: The size of fisherman's household i.e. total number of member living in fisherman's household will be recorded in this item.

Item 4: residential place of fisherman: The name of village/town where fisherman residing will be recorded in this item.

Item 5: social group: Whether or not the fisherman's household belongs to scheduled tribe, scheduled caste or other backward class will be indicated against this item in terms of the specified codes which are:

scheduled tribe (ST) - 1, scheduled caste (SC)-2. other backward class (OBC) -3, others - 9

Item 6: religion: The religion of the fisherman's household will be recorded against this item in code.

The codes are: Hinduism	1	Islam2. Christianity	3
Sikhism 4		others9	

Item 7: education level: The highest level of education completed by the member of the fisherman's household considering all the general educational level successfully completed by him/her, will be recorded here in terms of codes. The codes for the highest level of education completed to be recorded in column 6 are given below:not literate-1, literate-2, primary-3, upper primary/middle-4, high school-5, higher secondary-6, gradution-7, post gradution-8, others-9

Item 8: age: The age in completed years of all the members of fisherman's household listed will be ascertained and recorded in this column.

Item 9: whether fisherman's other members of household are engaged in fishing: In this item information will be reported that whether other member of household of fisherman's is involved with the same activity or else. If it will be same activity then code 1 will be entered otherwise code 2.

Item 10: whether head of the family is involved in fishing: If head of the household of fisherman is engaged in fishing activity, then provide code 1 for yes or code 2 for no against this item.

Item 11: whether household of fisherman is trained: If any member of fisherman's household had taken in past any kind of formal or non-formal training for fishing (which is 3

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to 10 days) given by government or any private agency/ NGO will be considered against this item.

Item 12: if yes then time duration for training: If code 1 in item 11, then fisherman will be asked for the time duration of training taken by himself or by any member of his household. Item 12: time period of involvement in catching of fishing: Here the total time period from when he was doing the fishing activity will be entered in years.

Item 13: number of members in fisherman's household involved in catching fish: Total number of members involved in fishing activity of fisherman's household will be recorded here. Item 14: working day in a week: Within a week total number of days that fisherman gives usually for fishing activity will be entered against in this item.

Item 15: Average time in a day: The number of hours, on an average fisherman spent for fishing activity in a day will be recorded here. It will include the onshore component; for example, the time spent cleaning the net, preparing the catch, repairing the boat.

Block 2:

Detail of collection of catching fish:

Item 1: Name of place for catching fish: Here the name of place from where fisherman collect the fish for example name of annicut, canal etc will be recorded. If he collect fish from more than one place than the name of place from where more fish is caught will be recorded.

Item 2: distance of place for catching fish from home: Distance of his dwelling unit from the place where he used to catch fish will be recorded here in km.

Item 3: name of the species generally collected: All the name of species of fish which he usually catches will be provided against this item. This item is further divided in two category major carp and local fishes. Major carp includes katla, rohu, mrigra, common carp, grasscarp, silvercarp etc. Name of particular fish, its quantity, and accordingly rate will be entered here.

Item 4: resources used for catching fish: All resources that fisherman used for catching fish for example net, boat, tube, etc will be recorded in this item.

Item 5: type of resources: Whether the resources used to catch fishes by fisherman is own or hired will be determined against this item.

Item 6: amount of fish generally collected everyday: The quantity of fish that generally fisherman used to catch everyday will be provided here in kilograms.

Item 7: amount of fish collected in last 7 days: Information about collection of fish which was collected by the fisherman in last 7 days from the date of survey will be recorded here in kilograms.

Item 8: amount of fish consumed by themselves: Total amount of fish which was used by fisherman and household as food in last seven days from they caught will be recorded here.

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Item 9: Total expenditure during collection and selling of fishes: The total cost for the last 7 days for collection and selling of fish which included fuel cost for boat if any, ice box cost for storage if any cost of purchasing net or maintenance cost will be entered against in this item. Item 10: whether catching of fish is the main activity of household's livelihood: select code 1 for yes otherwise code 2 if the owner is mainly engaged in fishing and fishing is the main source of income for livelihood

Item 11: If not, detail of major source of household's livelihood: If fishing is not the main source of household's livelihood, then in this item the description of main activity of household which generate major income will be given.

Item 12: average annual income by major source of household's livelihood except fishing: In this item information will be captured about the average annual income in Rs from the main activity of household which generate major income except fishing.

Item 13: place for selling of fishes: Information about place where fisherman used to sell his fish will be recorded with admissible code.

wholesale market-1, on spot direct to consumer-2, retail market-3, other-9

Item 14: income received in last 7 days by selling of fishes: Total revenue generated by selling fish to fisherman will be recorded here in Rs. within last 7 days.

Item 15: whether fisherman is member of machhuara samitti: This item is to provide information for whether fisherman or his household members are registered in primary fish cooperative society, if yes than code 1 will be entered otherwise code 2.

Item 16: whether household received any help by government for catching fish: Government provides many facilities to fisherman for improving their livelihood and production of fish like seeds, subsidy to buy equipment's, training, insurance or any other help. If the fisherman or his household received any help from government body then code 1 otherwise code 2 will be recorded here that information will be recorded here by admissible codes

Item 17: If yes then specify: If in item 14 code 1 is entered i.e. fisherman or his household received any help from government body than type of help will be written against in this item with admissible codes:

seeds-1, subsidy-2, training-3, insurance-4, others-5

Limitation:-

Following are the limitation of the outcome of the project:

Survey Data Must be used only for Directorate of Economics and statistics Raipur, Chhattisgarh. Not For any other Purpose.

Survey will be conducted on the basis of list provided by DES Chhattisgarh Minor Forest Produce, Phad List and list of anicuts for Non Professional Fisherman.

Survey Design and sample list must cover Phad of whole Chhattisgarh including all district with appropriate ratio.

Final Report on both survey must be handover on time.

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Reporting and Deliverables

PRSU shall submit the following deliverables:

- Inception report;
- Survey instruments (filled Scheduled, manuals, selected Phad list, questionnaires);
- Micro Level Data after Survey (Unit level Data)
- Interim progress reports;
- Final analytical report and data set in agreed format (MS Excel and MS Word Software).

Project Timelines

Both the Project implementation will be completed in 06 months followed by analysis of Data and Report Generation for another 1 months This MoU shall be valid for a period of one (1) year from the date of signing or until the final report submission, whichever is earlier. It may be extended by mutual consent.

Roles & Responsibilities

Department pf Economics and Statistics (DES) -**DES** shall:

- Define the survey objectives and key parameters.
- Approve the survey tools/questionnaires.

Survey Supervision of 2% Sample By DES.

- Provide necessary administrative support and facilitation with field offices.
- Offer financial support as mutually agreed.

Pt. Ravishankar Shukla University, Raipur, Chhattisgarh PRSU shall:

- Prepare the sampling methodology, and data collection tools;
- Conduct field survey and data collection through trained personnel;
- Undertake data validation, analysis, and report preparation;
- Ensure confidentiality and ethical handling of data.

Governing Structure

To effectively execute and monitor the Survey, different committees will be formed as per under Steering Committee: This project will be governed by a steering committee which will be constituted with following officials -

Vice Chancellor PRSU **Director DES** Additional Director DES Subject Matter Expert – DES and PRSU

Financial Terms & Conditions

Project Cost:

As per preliminary estimation, the estimated project cost of the Contribution of Minor Forest Products Survey is Rs 60.20 Lakh, and the Nonprofessional Fisherman survey is Rs 38.44 Lakh. PRSU has submitted a detailed component-wise cost breakdown to DES.

Mode of Payment and Payment Schedule:

The Project work (both Contribution of Minor Forest Products, Nonprofessional Fisherman survey) will be initiated after receiving of 25% advance as mobilization. 2nd Installment 50% will be released after Completing Field survey and rest 25% will be released after submitting final Report.

Force Majeure:

- a) The terms of force majeure shall include acts of God, Earthquakes, war riots, fire, flood famine, sabotage, law and order situation, pandemic and local disturbance in the area of operation.
- b) All payments due for work done before the interruption due to force majeure shall be payable.
- c) Either party reserves the right to terminate the MOU after lapse of 180 days if force continues.

Signatures.

Director Director

Birectorate of Economics & Statistics, Birectorate of Economics and Statistics,

Raipur, C.G.

Registrar REGISTRAR

Pt. Ravasijankar Shukla University, RAIPUR (Chhattisgarh)

Raipur, Chhattisgarh

Witness:

Name

Designation

Signature

1. Dr. L. S. Cappal

Professor

2. Keshar Kant Sahn Professar